

**ENGINEERING DIRECTIVE**  
CHIEF ENGINEER**SUPERSEDED**  
CORRECTION TO DIRECTIVE #E-97-004**IN RESPONSE TO MGL CH 87 ACTS OF 1996  
BICYCLE AND PEDESTRIAN ACCOMMODATION**

Project design engineers shall use sound engineering practice in making reasonable provisions to accommodate bicycles and pedestrians in project designs. This generally includes assuring continuous paths of travel with smooth surfaces and without obstructions or impediments.

**Benchmark for Bicycle Accommodation**

The Massachusetts Highway department benchmark for reasonable bicycle accommodation is to provide a continuous paved usable shoulder adjacent to the outside travel lane in each direction on roadways where bicycles are legally permitted. The desirable width of the outside travel lane plus the paved usable shoulder (curb lane) is at least 5.0 meters (plus 0.5 meter "guardrail" offset). When this width cannot be reasonably accommodated, the minimum width of the outside travel lane plus the paved usable shoulder (curb lane) for the accommodation of bicycles is 4.5 meters (plus 0.5 meter offset). For roadways with low speeds of less than 45 mph (85th percentile speeds) combined with low volumes of less than 2000 AADT, the minimum roadway widths as defined in Chapter 8 of the Highway Design Manual may be used to conform with bicycle accommodation. This directive does not preclude the use of additional AASHTO design guidance for bicycle accommodation.

**Benchmark for Pedestrian Accommodation**

The Massachusetts Highway Department benchmark for pedestrian accommodation is to provide at least one continuous paved surface or sidewalk along all roadways where pedestrian access is legally permitted. Sidewalks must be in full conformance with AAB/ADA regulations.

## **Documentation of Non-Conformance**

The designer shall determine as soon as possible in the design process, and prior to 25% design approval, whether it is feasible to accommodate bicycles and pedestrians as outlined herein. If accommodation is not attainable, the designer must document why such accommodation was not reasonably attainable. Such documentation shall be forwarded for review to the Bicycle/Pedestrian Coordinator designated to carry out this Directive.

### **Criteria to Consider When Determining Reasonable Accommodation:**

- Impacts on Environmental Quality including: Wetlands, Floodplain, Storm Water, Trees, Park Land, Rare and Endangered Species Habitat
- Projects on Scenic Roads
- Archeological or Historical areas
- Compatibility with existing and future adjacent roadway sections
- "Footprint" Bridge projects
- Existing parallel facilities
- Conflicts with on-street parking
- Compatibility with surrounding area
- Public Safety
- Public support
- Impacts on existing Rights of Way